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Contd

4. (Amended) Apparatus according to claim 1, wherein the B0 shim coil assembly (2; 2') is constructed from a material having a critical current value, at which the B0 shim coil assembly would revert to the normal conducting state, which is significantly greater than the value of the current required to compensate for time variation of the magnetic field within the working volume.

5. (Amended) Apparatus according to claim 1, wherein the B0 shim coil assembly (2; 2') incorporates at least one coil wound on the same former as at least one coil of the main coil assembly.

6. (Amended) Apparatus according to claim 1, wherein the auxiliary current supply means (6) incorporates a superconducting switch (4) including a heating element for heating the switch (4) to drive it out of its superconducting state to cause the current passing through the switch (4) to decay.

7. (Amended) Apparatus according to claim 1, wherein the main current supply means (5) incorporates a superconducting switch (3) including a heating element for heating the switch (3) to drive it out of its superconducting state to cause the current in the main coil assembly (1; 1') to decay.

8. (Amended) Apparatus according to claim 1, wherein the auxiliary current supply means (6) includes input terminals to which current is supplied under control of the control means (31) during initial energisation of the B0 shim coil assembly (2; 2'), such current supply to the input terminals being terminated when the current flowing in the closed loop has reached the desired level.